

In the Claims

Please replace the pending claims with the following:

1. (Cancelled)
2. (Cancelled)
3. (Cancelled)
4. (Cancelled)
5. (Cancelled)
6. (Cancelled)
7. (Cancelled)
8. (Cancelled)
9. (Cancelled)
10. (Cancelled)
11. (Cancelled)
12. (Cancelled)
13. (Cancelled)
14. (Cancelled)
15. (Cancelled)
16. (Cancelled)

17. (Amended) An apparatus for use in parallel reaction of materials, comprising:

a base having a plurality of reaction wells formed in an upper surface of the base and extending partially therethrough, each of said reaction wells having a closed lower end defined by the base and an open upper end for receiving components for the reaction;

a cover configured for sealing engagement with the base to form a housing enclosing said plurality of reaction wells and defining a common pressure chamber in communication with said plurality of reaction wells;

an inlet port in communication with said pressure chamber for supplying pressurized fluid to said chamber to pressurize said plurality of reaction wells; and

a flow restriction device positioned adjacent to said open ends of the reaction wells and comprising flow passageways formed therein to provide a primary flow passage between the reaction wells and said pressure chamber while reducing cross-talk between the reaction wells;

wherein the housing is configured to sustain a pressure substantially above atmospheric pressure.

18. (Original) The apparatus of claim 17 wherein the flow restriction device comprises a plurality of vent holes formed therein and aligned with said plurality of reaction wells.

19. (Amended) An apparatus for use in parallel reaction of materials, comprising:

a base having a plurality of reaction wells formed in an upper surface of the base and extending partially therethrough, each of said reaction wells having a closed lower end defined by the base and an open upper end for receiving components for the reaction;

a cover configured for sealing engagement with the base to form a housing enclosing said plurality of reaction wells and defining a common pressure chamber in communication with said plurality of reaction wells; and

a flow restriction device positioned adjacent to said open ends of the reaction wells to provide communication between the reaction wells and said pressure chamber while reducing cross-talk between the reaction wells, the flow restriction device comprising a plurality of flow passageways formed therein and aligned with said plurality of reaction wells, each of said flow passageways having a diameter substantially smaller than a diameter of the aligned reaction well; and

an inlet port in communication with said pressure chamber for supplying pressurized fluid to said chamber to pressurize said plurality of reaction wells;

wherein the housing is configured to sustain a pressure substantially above atmospheric pressure.

20. (Original) The apparatus of claim 17 wherein the flow restriction device comprises a plurality of check valves aligned with the reaction wells and configured to allow flow into the reaction wells and restrict flow from the reaction wells into said chamber.

21. (Original) The apparatus of claim 17 wherein the flow restriction device comprises a rigid member.

22. (Original) The apparatus of claim 17 wherein the flow restriction device comprises an elastomeric sheet.

23. (Original) The apparatus of claim 17 wherein the flow restriction device comprises a porous sheet.

24. (Original) The apparatus of claim 17 wherein the flow restriction device is removably attached to the base member with fastening means.

25. (Original) The apparatus of claim 17 further comprising a plurality of vials inserted into said plurality of reaction wells for receiving reaction components.

26. (Original) The apparatus of claim 25 further comprising a plurality of springs disposed at the bottom of the reaction wells for biasing the vials upward against the flow restriction device.

27. (Cancelled)

28. (Cancelled)

29. (Cancelled)

30. (Cancelled)

31. (Cancelled)

32. (Cancelled)

33. (Cancelled)

34. (Cancelled)

35. (Cancelled)

36. (Cancelled)

37. (Cancelled)

38. (Withdrawn from consideration by Examiner)

39. (Withdrawn from consideration by Examiner)
40. (Withdrawn from consideration by Examiner)
41. (Withdrawn from consideration by Examiner)
42. (Amended) An apparatus for use in parallel reaction of materials, comprising:
- a base having a plurality of reaction wells, each of said reaction wells having a closed lower end and an open upper end for receiving components for the reaction;
 - a cover configured for sealing engagement with the base to form a housing enclosing said plurality of reaction wells and defining a common pressure chamber in communication with said plurality of reaction wells;
 - a flow restriction device positioned adjacent to said open ends of the reaction wells and comprising flow passageways formed therein to provide a primary flow passage between the reaction wells and said pressure chamber while reducing cross-talk between the reaction wells; and
 - an inlet port in communication with said pressure chamber for supplying pressurized fluid to said chamber to pressurize said plurality of reaction wells.
43. (Original) The apparatus of claim 42 wherein the flow restriction device comprises a rigid member.
44. (Original) The apparatus of claim 42 wherein the flow restriction device comprises an elastomeric sheet.
45. (Original) The apparatus of claim 42 wherein the flow restriction device comprises a porous sheet.

46. (Original) The apparatus of claim 42 wherein the flow restriction device comprises a plurality of vent holes formed therein and aligned with said plurality of reaction wells.

47. (Amended) An apparatus for use in parallel reaction of materials, comprising:

a base having a plurality of reaction wells, each of said reaction wells having a closed lower end and an open upper end for receiving components for the reaction;

a cover configured for sealing engagement with the base to form a housing enclosing said plurality of reaction wells and defining a common pressure chamber in communication with said plurality of reaction wells;

a flow restriction device positioned adjacent to said open ends of the reaction wells communication between the reaction wells and said pressure chamber while reducing cross-talk between the reaction wells; the flow restriction device comprising a plurality of flow passageways formed therein and aligned with said plurality of reaction wells, each of said flow passageways having a diameter substantially smaller than a diameter of the aligned reaction well; and

an inlet port in communication with said pressure chamber for supplying pressurized fluid to said chamber to pressurize said plurality of reaction wells.

48. (Original) The apparatus of claim 42 wherein the flow restriction device comprises a plurality of check valves aligned with the reaction wells and configured to allow flow into the reaction wells and restrict flow from the reaction wells into said chamber.

49. (Original) The apparatus of claim 42 further comprising a plurality of vials inserted into said plurality of reaction wells for receiving reaction components.

50. (Original) The apparatus of claim 49 further comprising a plurality of springs disposed at the bottom of the reaction wells for biasing the vials upward against the flow restriction device.

51. (Original) The apparatus of claim 42 wherein said pressurized fluid is pressurized substantially above atmospheric pressure.

52. (Cancelled)

53. (Cancelled)